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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,581	03/22/2005	Adrian Kopp	004501-790	1899
21839 BUCHANAN	7590 06/01/200 INGERSOLL & ROO	EXAMINER		
POST OFFICE BOX 1404			KOCZO JR, MICHAEL	
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
			3746	
			MAIL DATE	DELIVERY MODE
			06/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Commence	10/510,581	KOPP ET AL.				
Office Action Summary	Examiner	Art Unit				
	Michael Koczo, Jr.	3746				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 19 Ap	oril 2007					
· <u> </u>	, <del>-</del>					
. —	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
	A parto quayro, 1000 o.b. 17, 10					
Disposition of Claims						
4) Claim(s) 13-21 is/are pending in the application	4) Claim(s) 13-21 is/are pending in the application.					
4a) Of the above claim(s) 18 is/are withdrawn fr	4a) Of the above claim(s) 18 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) 13-17, 19-21 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
,,	·					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents	s have been received in Application	on No				
3. Copies of the certified copies of the prior						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08)	5) D Notice of Informal P					
Paper No(s)/Mail Date	6)					
S. Patent and Trademark Office						

### DETAILED ACTION

### Election/Restrictions

Applicant's election of the species of figures 2A and 2B, without traverse, is acknowledged. Claim 18 therefore stands withdrawn from further consideration as being drawn to a non-elected species.

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14 to 17 and 19 to 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 14 to 17, 20 and 21 are incomplete because they are dependent on a canceled claim. In the art rejections which follow, the claims which are dependent on claim 1 are presumed to have been intended to be dependent on claim 13.

In claim 14, line 2, and claim 19, line 9, stating that the "means for axially locking the shaft <u>interacts</u> [emphasis added] with bearing elements of the shaft" does not clearly set forth the structural relationship between the means and the bearing elements.

In claim 19, line 9, stating that the "means is connected to the shaft in such a way that it interacts [emphasis added] with bearing elements of the shaft" does not clearly set forth the structural relationship between the means and the bearing elements.

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In claim 19, line 9, the "bearing elements" appear to be a double inclusion of the "bearings" in line 4.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 13 to 17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Romeo (US 4,969,805). See figures 6 and 7 which show grooves 44 and 58 and a locking ring 42 for axially locking the shaft 14.

Claims 13, 14, 15 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Tombers et al (US 6,499,969). See thrust reaction surfaces 58 and 60 on the shaft for axially locking the shaft (see figure 2). The thrust reaction surfaces 58 and 60 interact with bearings on the shaft as shown in figure 1.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Romeo. Whether the locking ring 42 is enclosed in the grooves 44 and 58 with or without clearance is deemed to be a matter of design choice. For example, providing a clearance would reduce the friction on the locking ring but at the expense of not maintaining the shaft at an exact axial position.

### Conclusion

Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Koczo, Jr. whose telephone number is 571-272-4830. The examiner can normally be reached on M-Th; 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony D. Stashick can be reached at 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Koczo, Jr. Primary Examiner

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